UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,589	08/21/2006	Martin Alles	GRA26 021PCT US	7201
79172 7590 09/22/2009  Duane Morris LLP  EXAMINER				
505 9th Street, I Suite 1000	N.W.	SOBUTKA, PHILIP		
Washington, Do	C 20004		ART UNIT	PAPER NUMBER
			2618	
			MAIL DATE	DELIVERY MODE
			09/22/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Comments	10/566,589	ALLES ET AL.			
Office Action Summary	Examiner	Art Unit			
	PHILIP J. SOBUTKA	2618			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on					
	-· action is non-final.				
	·—				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
dissect in assertations with the practice and in	x parte quayre, 1000 0.D. 11, 10	0.0.2.0.			
Disposition of Claims					
<ul> <li>4)  Claim(s) 1-44 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) 17-22 is/are allowed.</li> <li>6)  Claim(s) 1-16, 23-44 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
Application Papers					
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on 31 January 2006 is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 03/24/2006.  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  Other:					

Art Unit: 2618

### **DETAILED ACTION**

#### Information Disclosure Statement

- 1. The following is a quotation of 37 C.F.R. § 1.98 Regarding Content of information disclosure statement.
  - (b) (5) Each publication listed in an information disclosure statement must be identified by publisher, author (if any), title, relevant pages of the publication, date, and place of publication.
- The information disclosure statement filed March 24, 2008 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because it fails to list year **and month** of publication. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 4. Claim 6, 7, 16 and 32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The amplification of the primary and signature components of the aggregate signal does not appear to be discussed in the specification or shown in the drawings. It is also noted that the specification and drawing discuss the primary signal being modulated by or with the signature signal to produce the aggregate; this is not conventionally understood as amplification.

# Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1-8,10-14,26-31,33-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Durrant et al (US 6,501,955).

Consider claim 1. Durrant teaches in a communication system including a first node, a second node, and a repeater that applies a known modification to a primary communication signal passing there through that identifies the repeater, where the first node receives a first signal from the second node either directly or via the repeater, and where the first signal includes a primary communication signal and, if the first signal is

received from the repeater, also includes a signature signal that is a function of the primary communication signal and the known modification applied by the repeater, the method of determining if a signal received by the first node is received directly from the second node or indirectly through the repeater, comprising the steps of:

receiving the first signal at the first node (first node is the base station shown in figure 1, see also figures 4,5, and column 9, line 56 – column 10, line 12);

extracting the primary communication signal from the first signal (primary signal is shown in figure 5 as the TOA raw data from receiver 140, see also column 9, line 56 – column 10, line 19);

producing a candidate signature signal as a function of the primary communication signal and the known modification applied by the repeater (signature signal shown in figure 5 as the repeater tag ID); and

determining whether the first signal has been received from the repeater by processing of the candidate signature signal and at least a portion of the first signal (determination of repeater ID, which of course incorporates whether the signal has been repeated is shown in figures 4,5 column 9, lines 38-55).

Consider claim 2. Durrant teaches the method of claim 1 wherein the communication system is a wireless communication system (Durrant teaches a wireless communication system see column 1, lines 15-65).

Consider claim 3. Durrant teaches the method of claim 1 wherein the first node is a network analysis system (Durrant's location measuring base station corresponds to

the claimed network analysis system, see figure 4, column 9, lines 55 – column 10, lines 20).

Consider claim 4. Durrant teaches the method of claim 1 wherein the first node is a geolocation system (Durrant's location measuring base station corresponds to the claimed geolocation system, see figure 4, column 9, lines 55 – column 10, lines 20).

Consider claim 5. Durrant teaches the method of claim 1 wherein the second node is a mobile unit (Durrant teaches the second node is a mobile unit see for example figure 1 column 4, line 12-60, column 9, line 56- column 10, line 12).

Consider claim 6. Durrant teaches the method of claim 1, wherein the primary signal is a uplink signal (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20).

Consider claim 7. Durrant teaches the method of claim 1, wherein the primary signal is a downlink signal (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20).

Consider claim 8. Durrant teaches the method of claim 1, wherein the known modification is multiplication of a second signal (Durrant teaches the modification being modulated, i.e. a multiplication of the signal, see figures 2, 3).

Consider claim 10. Durrant teaches in a communication system including a first node, a second node, and a repeater, wherein the first node receives a first signal from the second node either directly or via the repeater, a method of applying a known modification to a signal to enable a determination of a signal received by the first node

is received directly from the second node or indirectly through the repeater, comprising the steps of:

at the repeater receiving a primary signal and creating a signature signal as a function of the primary signal and a known second signal, wherein the second signal identifies the repeater (Durrant teaches tagging which corresponds to the claimed signature signal, see figures 2,3, column 5, lines 10-35, column 6, lines 15-26, column 7, lines 35-47),

transmitting the primary signal and the signature signal as the first signal to the first node (Durrant teaches transmitting the tagged signal, see figures 2,3, column 5, lines 10-35, column 6, lines 15-26, column 7, lines 35-4).

Consider claim 11. Durrant teaches the method of claim 10 wherein the communication system is a wireless communication system (Durrant teaches a wireless communication system see column 1, lines 15-65).

Consider claim 12. Durrant teaches the method of claim 10 wherein the first node is a network analysis system (Durrant's location measuring base station corresponds to the claimed network analysis system, see figure 4, column 9, lines 55 – column 10, lines 20).

Consider claim 13. Durrant teaches the method of claim 10 wherein the first node is a geolocation system (Durrant's location measuring base station corresponds to the claimed geolocation system, see figure 4, column 9, lines 55 – column 10, lines 20).

Application/Control Number: 10/566,589

Art Unit: 2618

Consider claim 14. Durrant teaches the method of claim 10 wherein the second node is a mobile unit (Durrant teaches the second node is a mobile unit see for example figure 1 column 4, line 12-60, column 9, line 56- column 10, line 12).

Page 7

Consider claim 26. Durrant teaches in a communication system including a first node, a second node, and a repeater that applies a known modification to a primary communication signal passing therethrough that identifies the repeater, where the first node receives a first signal from the second node either directly or via the repeater, and where the first signal includes a primary communication signal and, if the first signal is received from the repeater, also includes a signature signal that is a function of the primary communication signal and the known modification applied by the repeater,

the method of determining if a signal received by the first node is received directly from the second node or indirectly through the repeater, comprising the steps of:

receiving the first signal at the first node (first node is the base station shown in figure 1, see also figures 4,5, and column 9, line 56 – column 10, line 12);

detecting the primary communication signal from the first signal (primary signal is shown in figure 5 as the TOA raw data from receiver 140, see also column 9, line 56 – column 10, line 19);

producing a candidate aggregate signal as a function of the primary communication signal and the known modification applied by the repeater (the claimed known modification signal is shown in figure 5 as the repeater tag ID); and

determining whether the first signal has been received from the repeater by processing of the candidate aggregate signal and at least a portion of the first signal (determination of repeater ID, which of course incorporates whether the signal has been repeated is shown in figures 4,5 column 9, lines 38-55).

Consider claim 27. Durrant teaches the method of claim 26 wherein the first node is a network analysis system (Durrant's location measuring base station corresponds to the claimed network analysis system, see figure 4, column 9, lines 55 – column 10, lines 20).

Consider claim 28. Durrant teaches the method of claim 26 wherein the first node is a geolocation system (Durrant's location measuring base station corresponds to the claimed geolocation system, see figure 4, column 9, lines 55 – column 10, lines 20).

Consider claim 29. Durrant teaches the method of claim 26 wherein the second node is a mobile unit (Durrant teaches the second node is a mobile unit see for example figure 1 column 4, line 12-60, column 9, line 56- column 10, line 12).

Consider claim 30. Durrant teaches the method of claim 26, wherein the primary signal is a uplink signal (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20).

Consider claim 31. Durrant teaches the method of claim 26, wherein the primary signal is a downlink signal (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20).

Consider claim 33. Durrant teaches the method of claim 1, wherein the first node is a mobile unit (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20, therefore the first or second could be a mobile unit as shown in Durrant see for example figure 1 column 4, line 12-60, column 9, line 56- column 10, line 12).

Consider claim 34. Durrant teaches the method of claim 1, wherein the second node is a network analysis system (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20, therefore the first or second could comprise Durrant's location measuring unit which corresponds to the claimed network analysis system, see figure 4, column 9, lines 55 – column 10, lines 20).

Consider claim 35. Durrant teaches the method of claim 1, wherein the second node is a geolocation system (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20, therefore the first or second could be Durrant's location measuring unit which corresponds to the claimed geolocation system, see figure 4, column 9, lines 55 – column 10, lines 20).

Consider claim 36. Durrant teaches the method of claim 26, wherein the first node is a mobile unit (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20, therefore the first or second could be a mobile unit as shown in Durrant see for example figure 1 column 4, line 12-60, column 9, line 56- column 10, line 12)

Art Unit: 2618

Consider claim 37. Durrant teaches the method of claim 26, wherein the second node is a network analysis system (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20, therefore the first or second could comprise Durrant's location measuring unit which corresponds to the claimed network analysis system, see figure 4, column 9, lines 55 – column 10, lines 20).

Consider claim 38. Durrant teaches the method of claim 26, wherein the second node is a geolocation system (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20, therefore the first or second could be Durrant's location measuring unit which corresponds to the claimed geolocation system, see figure 4, column 9, lines 55 – column 10, lines 20).

Consider claim 39. Durrant teaches the method of claim 23 wherein the first node is a network analysis system (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20, therefore the first or second could comprise Durrant's location measuring unit which corresponds to the claimed network analysis system, see figure 4, column 9, lines 55 – column 10, lines 20).

Consider claim 40. Durrant teaches the method of claim 23 wherein the first node is a geolocation system (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20, therefore the first or second could be Durrant's location measuring unit which corresponds to the claimed geolocation system, see figure 4, column 9, lines 55 – column 10, lines 20).

Consider claim 41. Durrant teaches the method of claim 23 wherein the second node is a mobile unit (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20, therefore the first or second could be a mobile unit as shown in Durrant see for example figure 1 column 4, line 12-60, column 9, line 56- column 10, line 12).

Consider claim 42. Durrant teaches the method of claim 23, wherein the first node is a mobile unit (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20, therefore the first or second could be a mobile unit as shown in Durrant see for example figure 1 column 4, line 12-60, column 9, line 56- column 10, line 12).

Consider claim 43. Durrant teaches the method of claim 23, wherein the second node is a network analysis system (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20, therefore the first or second could comprise Durrant's location measuring unit which corresponds to the claimed network analysis system, see figure 4, column 9, lines 55 – column 10, lines 20).

Consider claim 44. Durrant teaches the method of claim 23, wherein the second node is a geolocation system (Durrant's tagged signal could be uplink or downlink, i.e. forward or reverse see for example column 3, lines 18-20, therefore the first or second could be Durrant's location measuring unit which corresponds to the claimed geolocation system, see figure 4, column 9, lines 55 – column 10, lines 20).

Art Unit: 2618

## Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 9. Claims 9, 23,24,25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Durrant.

Consider claim 9. See MPEP 2143:

Examples of Basic Requirements of a *Prima Facie* Case of Obviousness The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1395-97 (2007) identified a number of rationales to support a conclusion of obviousness which are consistent with the proper "functional approach" to the determination of obviousness as laid down in Graham. The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.

**EXEMPLARY RATIONALES** 

Exemplary rationales that may support a conclusion of obviousness include:

(B) Simple substitution of one known element for another to obtain predictable results;

In this case, Durrant teaches the method of claim 8, but lacks a teaching of wherein the second signal is an AM Golay Hadamard sequence. Durrant teaches the tag could be various types of code. Therefore the prior art differs from the claim by the substitution of one type of code for another. Official notice is taken that Golay Hadamard is a know type of code, therefore it would have been obvious to one of ordinary skill in the art to substitute Golay Hadamard code in order to obtain predictable results, i.e. a coded signal.

### Consider claim15. See MPEP 2143:

Examples of Basic Requirements of a *Prima Facie* Case of Obviousness The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1395-97 (2007) identified a number of rationales to support a conclusion of obviousness which are consistent with the proper "functional approach" to the determination of obviousness as laid down in Graham. The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.

#### **EXEMPLARY RATIONALES**

Exemplary rationales that may support a conclusion of obviousness include:

(B) Simple substitution of one known element for another to obtain predictable results;

In this case, Durrant teaches the method of claim 10, but lacks a teaching of wherein the known second signal is a Golay Hadamard sequence. Durrant teaches the

Art Unit: 2618

tag could be various types of code. Therefore the prior art differs from the claim by the substitution of one type of code for another. Official notice is taken that Golay Hadamard is a know type of code, therefore it would have been obvious to one of ordinary skill in the art to substitute Golay Hadamard code in order to obtain predictable results, i.e. a coded signal.

#### Consider claim 23. See MPEP 2143:

Examples of Basic Requirements of a *Prima Facie* Case of Obviousness The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1395-97 (2007) identified a number of rationales to support a conclusion of obviousness which are consistent with the proper "functional approach" to the determination of obviousness as laid down in Graham. The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.

#### **EXEMPLARY RATIONALES**

Exemplary rationales that may support a conclusion of obviousness include:

(B) Simple substitution of one known element for another to obtain predictable results;

In this case, Durrant teaches a wireless communication system having a plurality of repeaters and a network overlay geolocation system, said geolocation system having a plurality of wireless location sensors for measuring an attribute of an uplink signal of a mobile appliance for determining the location of the mobile appliance based on the attribute and the location of the wireless location sensors (Durrant teaches tagging

Art Unit: 2618

repeater signals see figures 2,3, column 5, lines 10-35, column 6, lines 15-26, column 7, lines 35-47, also figures 4,5, and column 9, line 56 – column 10, line 12),

but lacks a teaching of the improvement wherein each of the plurality of repeaters have an associated unique AM Golay Hadamard sequence and a signal multiplier for applying the associated unique AM Golay Hadamard sequence to a copy of the uplink signal received from the mobile appliance. Durrant teaches the tag could be various types of code. Therefore the prior art differs from the claim by the substitution of one type of code for another. Official notice is taken that Golay Hadamard is a know type of code, therefore it would have been obvious to one of ordinary skill in the art to substitute Golay Hadamard code in order to obtain predictable results, i.e. a coded signal.

Consider claim 24. Durrant as modified above teaches the system of claim 23, wherein the geolocation system comprises a set of AM Golay Hadamard sequences corresponding to the associated unique AM Golay Hadamard sequences for each of the plurality of repeaters.

Consider claim 25. Durrant teaches the system of claim 23, wherein the plurality of repeaters are synchronized (Durrant's repeaters are synchronized, see for example column 6, lines 45-65).

## Allowable Subject Matter

10. Claims 17-22 are allowed.

Art Unit: 2618

11. Consider claim 17. the nearest prior art as shown in Durrant fails to teach, in a wireless communication system having one or more repeaters, a first node and a second node, a method of determining if a signal received at the first node is received directly or via one of the one or more repeaters comprising; multiplying, at the one or more repeaters, a primary signal s(t) received from the second node by (1+r(t)), where r(t) is an AM Golay Hadamard sequence unique for each of the one or more repeaters to form the primary signal s(t) and a signature signal s(t)r(t) combined as an aggregate signal; transmitting the aggregate signal s(t)(1+r(t)) to the first node; detecting at the first node the primary signal s(t); creating a set of candidate signature signals as a function of s(t) and the AM Golay Hadamard sequences for the one or more repeaters; detecting one or more of the candidate signature signals s(t)r(t) in the aggregate signal to thereby determine if the signal is received via the one or more repeaters.

### Conclusion

- 12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J Sobutka whose telephone number is 571-272-
- 7887. The examiner can normally be reached Monday through Friday from 8:30 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4711.

13. The central fax phone number for the Office is 571-273-8300.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number.

Art Unit: 2618

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip J Sobutka/ Primary Examiner, Art Unit 2618

(571) 272-7887